

REMARKS

Status Of Application

Claims 52-67 are pending in the application; the status of the claims is as follows:

Claim 64 is rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,034,804 to Sasaki et al ("Sasaki").

Claims 52-67 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,067,029 to Takahashi ("Takahashi") in view of Sasaki.

Claims 52-67 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi in view of U.S. Patent No. 4,887,161 to Watanabe et al ("Watanabe").

Claim Amendments

Claims 52-55 and 64 have been amended to improve the form thereof. These changes do not introduce any new matter.

35 U.S.C. § 102(e) Rejection

The rejection of claim 64 under 35 U.S.C. § 102(e) as being anticipated by Sasaki, is respectfully traversed based on the following.

Claim 64 has been amended to recite, *inter alia*, a digital camera comprising a controller adapted to "determine a remaining capacity of a memory card after the first image is stored to the memory card and prior to accepting a user input to capture a second image." That is, the capacity of memory card is determined after a first image is stored in the memory card and before the user pushes the shutter release to begin capturing a second image. This is shown for example in the flow chart of Figs. 15A and 15B.

In contrast, Sasaki only discloses that the capacity of the memory card is determined after the shutter release is pressed and before the captured image is stored on the memory card. *See* Fig. 10, wherein step ST5 (determining memory card capacity) occurs after step ST1 (shutter release), but before step ST7 (recording the image data). *See* column 9, lines 4-35. Therefore, Sasaki cannot disclose determining “a remaining capacity of a memory card after the first image is stored to the memory card and prior to accepting a user input to capture a second image,” as required by amended claim 64. Clearly, Sasaki is distinguished by amended claim 64.

Accordingly, it is respectfully requested that the rejection of claim 64 under 35 U.S.C. § 102(e) as being anticipated by Sasaki, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejections

The rejections of claims 52-67 under 35 U.S.C. § 103(a), as being unpatentable over Takahashi in view of either Sasaki or Watanabe, are respectfully traversed based on the following.

Claim 52 is directed to a camera that can record a captured image in either an internal memory or in a memory card, wherein storing the image in the memory card has priority over storing the image in the internal memory. Note that the internal memory is not merely a buffer memory, but is a memory for recording an image, i.e., more than transient storage. To make these feature more clear, claim 52 has been amended to recite, *inter alia*, “a recorder which stores image information, outputted from said imaging device, in one of the inside memory and the memory card to record the image information...” and “... the image information is automatically stored in the memory card without using the inside memory when the memory card is inserted in the card slot and the detected capacity shows that the image information can be stored in the memory card” That is, the controller records the image to the memory card without first storing it in the inside memory if the memory card has sufficient capacity, and the inside memory is

functionally equivalent to the memory card in that it is for recording an image, and is not just a temporary buffer memory.

It is respectfully submitted, that none of the cited references disclose, teach, or otherwise suggest the claimed features of claim 52. For example, Takahashi teaches a camera in which a user controlled switch (24) is used to select where an image is to be stored. Takahashi also briefly suggests that the controller may control switch (24) based on the speed of the signal to be captured or on the amount of data to be captured. See column 4, lines 2-4, and column 7, lines 43-48. However, Takahashi does not disclose or suggest that the controller operates the switch so that an image is preferentially stored in a removable storage medium.

Sasaki is cited as teaching a camera having a removable memory card. Image data captured by the camera is temporarily stored in buffer memory 31₆ and then transferred to the memory card. There is no means by which the data can be written to the memory card without first being written to the buffer memory. Thus, Sasaki fails to teach that “the image information is automatically stored in the memory card without using the inside memory” as required by amended claim 52.

Watanabe only teaches a camera that stores image data in image memory 22 in memory cartridge 20. Watanabe does not disclose, teach, or suggest, a camera with internal memory in addition to the memory cartridge. Thus, Watanabe adds nothing to cure the deficient teaching of Takahashi.

It is respectfully submitted that none of the cited references teaches a camera having an internal memory that is functionally equivalent to the memory in a removable memory card such that image data is written to the memory card without first writing it to the internal memory. It is further submitted that none of the cited references teach that captured image data is preferentially stored in the memory card. Therefore, any combination of Takahashi, Sasaki, and Watanabe is distinguished by amended claim 52, as well as by claims 56, 60, and 65-67, which depend therefrom.

Claim 53 has been amended to recite, *inter alia*, “a controller which controls said changer so that (a) the image information is automatically stored in the memory card when the memory card is inserted in the card slot and the detected capacity shows that the image information can be stored in the memory card, (b) the image information is automatically stored in the inside memory when the memory card is not inserted in the card slot and the image information can be stored in the internal memory....” These features require that the controller preferentially store the image data in the memory card. As provided above in respect of claim 52, this feature of amended claim 53 is not taught by any combination of Takahashi, Sasaki, and Watanabe. Therefore, any such combinations are distinguished by claim 53, as well as by claims 57 and 61 which depend therefrom.

Claim 54 has been amended to recite, *inter alia*, a camera comprising “a recorder which stores image information, outputted from said imaging device, in one of the inside memory and the memory card to record the information” and “a controller which controls said changer so that (a) the image information is automatically stored in the memory card without using the inside memory when the memory card is inserted in the card slot and the capacity detected by the detector is sufficient.” As provided above in respect of claim 52, these features are not taught by any combination of Takahashi, Sasaki, and Watanabe. It is respectfully submitted, therefore, that any such combinations are distinguished by claim 54, as well as by claims 58 and 62 which depend therefrom.

Claim 55 has been amended to recite, *inter alia*, a camera comprising “a controller which controls said changer so that (a) the image information is automatically stored in the memory card when the memory card is inserted in the card slot and the capacity detected by the detector is sufficient, and (b) the image information is automatically stored in the inside memory when the memory card is not inserted in the card slot and the remaining capacity of the inside memory is sufficient....” As provided above in respect of claim 53, this feature is not taught by any combination of Takahashi, Sasaki, and Watanabe. It is respectfully submitted, therefore, that any such combination is distinguished by claim 55, as well as by claims 59 and 63 which depend therefrom.

Claim 64 has been amended to recite, *inter alia*, a digital camera comprising a controller adapted to “determine a remaining capacity of a memory card after the first image is stored to the memory card and prior to accepting a user input to capture a second image.” That is, the capacity of memory card is determined after a first image is stored in the memory card and before the user pushes the shutter release to begin capturing a second image. As provided above in respect of the § 102 rejection of claim 64, this feature of claim 64 is not taught by Sasaki. It is respectfully submitted that this feature is also not taught by either Takahashi or Watanabe. Takahashi is silent on determining a capacity of a memory card. Watanabe teaches that when a memory cartridge is loaded, the camera controller searches the image memory 22 and acquires a blank area in the memory and data including the number of remaining frames or a next frame number. When a picture is taken, the number of remaining frames or the frame number is updated. This is similar to how the ‘picture counter’ in a conventional film camera functions. Thus, Watanabe teaches that actual capacity of the image memory is only determined when the memory cartridge is first loaded into the camera.

However, in a digital camera it is generally possible to vary the size of a captured image and the amount by which the captured image is compressed. Because the image size and compression can be varied, the amount of memory used by a stored image, i.e., a frame, also varies. Therefore, the remaining capacity of the memory needs to be determined every time an image/frame is stored in the memory. Clearly, Watanabe does not teach “a controller adapted to ... determine a remaining capacity of a memory card after the first image is stored to the memory card and prior to accepting a user input to capture a second image...” as required by claim 64. It is respectfully submitted, therefore, that claim any combination of Takahashi, Sasaki and Watanabe is distinguished by claim 64

Accordingly, it is respectfully requested that the rejection of claims 52-67 under 35 U.S.C. § 103(a) as being unpatentable over Takahashi in view of either Sasaki or Watanabe, be reconsidered and withdrawn.

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CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin LLP Deposit Account No. 18-1260.


If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

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and not submitted herewith should be charged to Sidley Austin LLP Deposit Account
No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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